3/30

SSPORTS ENVIRONMENTAL
DETACHMENT

POST OFFICE BOX 2135, VALLEJO CA 94592-2135

POLYCHLORINATED BIPHENYL (PCB) ASSESSMENT

FOR

PARCEL 03-L1

PREPARED FOR

ENGINEERING FIELD ACTIVITY-WEST
NAVAL FACILITIES ENGINEERING COMMAND
SAN BRUNO, CALIFORNIA

FINAL
SEPTEMBER 30, 1996

PREPARED BY:

J. P. FRASER
PCB ASSESSMENT AND SAMPLING
SSPORTS ENVIRONMENTAL DETACHMENT
P. O. BOX 2135,
VALLEJO, CA 94592-2135

APPROVED BY:

F. E. PAINE DATE 9/30/96
PROJECT MANAGER
PCB ASSESSMENT AND SAMPLING
SSPORTS ENVIRONMENTAL DETACHMENT
CODE 120PCB, P. O. BOX 2135,
VALLEJO, CA 94592-2135

REFERENCES:

(a) Mare Island Naval Shipyard 1994 Historical Building Survey

(b) Shipyard Basewide Environmental Baseline Survey Report (EBS)

(c) Preliminary Assessment/Site Inspection Final Summary Report Nonradiological Sites, PRC Environmental Management, Inc. May 19, 1995

(d) Work Plan, PCB Survey and Sampling for Possible Spill Sites

(e) 40 Code of Federal Regulations (CFR) Part 761

(f) 40 CFR Part 761 Proposed Rules, Federal Register December 6, 1994

(g) US EPA SW846 Test Methods for Evaluating Solid Waste, Physical/ Chemical Methods

(h) PCB Assessment Vallejo Ferry Fuel Farm and Maintenance Facility August 15, 1996

ENCLOSURES:

(1) Property Site Map of Parcel 03-L1

(2) Floor Plan of Buildings 461, 515, 757, 795, 975, and S11-04 with Sample Locations.

(3) Analytical Laboratory Reports for Parcel 03-L1 from SSPORTS Environmental Detachment Laboratory and CalScience Environmental Laboratories with various dates.

PURPOSE:

Superintendent of Ships Virginia (SSPORTS), Environmental Detachment, Vallejo, Technical Division, Code 120, Polychlorinated Biphenyl (PCB) Branch received direction by Engineering Field Activity - West (EFA-WEST) to investigate certain properties at Mare Island Naval Shipyard (MINS) for the potential presence of PCB contamination. The investigation would provide necessary information on the existing conditions of these properties to EFA-WEST, property managers of MINS, so they could certify to the City of Vallejo the status of these subject properties in order they may be leased.

The property discussed in this report is Parcel 03-L1 as shown in enclosure (1). The property is located between Waterfront and California avenues to the east and west, The Mare Island Causeway to the north with "C" street to the south.

Transformer Sub-stations 783, 785 and sewer pumping station 859 are under San Francisco Bay Public Works Center (PWC) cognizance.

HISTORY:

Parcel 03-L1 is designated as office and light industry. The major use over the years has been the shipyards original "Submarine Base," with battery repair services, diesel / lubrication oil transfer, ships berthing along with various repair shops and offices. The Parcel contains nineteen permanent structures: buildings 289, 457, 461, 471, 473, 477, 485, 515, 693, 757, 783, 785, 795, 845, 859, 923, 975, 985 and S11-04.

The first structure, building 289, was built in 1920 as the Torpedo Work Shop (before being converted into a warehouse in 1968). Building 289 was part of the "Submarine Service Wharf," along with building 515. The Submarine Service Building, 515, (built in 1941) was later converted into the Yard Tug Office.

Building 461 was constructed in 1932 and was used as the Battery Shop / Lab. This building was used in conjunction with buildings 463 "Acid Mixing Facility" (built the same year), 463a "Battery Test Facility" (built in 1937),and 757 "Battery Storage" (built in 1942). Also added to the parcel in 1942 were two Transformer sub-stations "D" and "3". These two sub-stations are listed as buildings 783 and 785.

Buildings 463 and 463a have been recently been demolished as part of IR 20.

HISTORY: (cont.).

Reference (c) identifies SWMU 034 as a industrial waste gravity oil separator T-2 located at B-985.
Reference (c) identifies SWMUs 035 through 064 as Acid related pertaining to IR 07.
Reference (c) identifies SWMU 092 as the Industrial Waste Pipeline collection system, SWMU 093as the storm sewer system, and SWMU 106 as the sanitary sewer system. SWMU's 092, 093, and 106 are generally applicable to the sanitary sewer systems of Mare Island.

Reference (b) identifies seven Hazardous Waste Accumulation Areas (HWAAs) located within the parcel, 99-2, 99-4, 99-5, 99-6, 99-8, 99-9, and 106-2 all of which are closed.

The electrical transformer history represented below is taken from the PWC transformer list.

TRANSFORMER	LOCATION	IN SERVICE	REMOVED	PCB LEVEL	REMARKS
T-0832	BLD. 461	01/01/42	01/01/93	500.00 PPM	LEAKED
T-0833	BLD. 461	01/01/42	01/07/93	500.00 PPM	LEAKED
T-0843	BLD. 461	01/01/42	01/07/93	500.00 PPM	LEAKED
T-1436	BLD. 461	01/01/64	IN USE	**0.00 PPM	DRY TYPE
T-2039	BLD. 461	01/01/92	IN USE	**0.00 PPM	NON-PCB
T-1902	BLD. 477	01/01/90	IN USE	**0.00 PPM	NON-PCB
T-0064	BLD. 485	01/01/67	05/29/79	**0.00 PPM	NO LEAKS
T-0492	BLD. 485	01/01/35	02/04/83	**0.00 PPM	LEAKED
T-0706	BLD. 485	01/01/43	10/10/86	**0.00 PPM	LEAKED
T-0837	BLD. 485	01/01/42	01/01/89	500.00 PPM	LEAKED
T-1450	BLD. 485	01/01/44	08/11/90	500.00 PPM	LEAKED
T-1961	BLD. 485	01/01/91	IN USE	**0.00 PPM	NON-PCB
T-0475	BLD. 783	01/01/35	05/01/87	**0.00 PPM	NO LEAKS
T-0598	BLD. 783	01/01/40	11/25/87	*16.80 PPM	NO LEAKS
T-0906	BLD. 783	01/01/44	11/25/87	*16.80 PPM	NO LEAKS
T-0907	BLD. 783	01/01/44	11/25/87	*22.39 PPM	NO LEAKS
T-0908	BLD. 783	01/01/44	11/25/87	*14.93 PPM	NO LEAKS
T-1829	BLD. 783	01/01/88	IN USE	**0.00 PPM	NON-PCB
T-0794	BLD. 785	01/01/42	IN USE	RETRO FILL	SEE NOTE 1
T-0795	BLD. 785	01/01/42	IN USE	*30.70 PPM	NO LEAKS
T-1901	BLD. 785	01/01/90	IN USE	**0.00 PPM	DRY TYPE
RA-25	BLD. 461	UNKNOWN	IN USE	RETRO FILL	SEE NOTE 1

NOTE 1: RETROFILLED WITH NON PCB DIELECTRIC FLUID 01/96. NO RESAMPLE DATA AVAILABLE, (EQUIPMENT UNDER PWC CONTROL).

There are no records of PCB containing electrical equipment remaining in Parcel 03-L1.

SAMPLING METHODOLOGY:

Buildings 289 was surveyed with all available electrical drawings. No PCB related items were noted.

Building 457 was previously closed 1/96; no additional PCB related items were noted.

Buildings 471, 473, 477, 923 and 985 have been previously released on Ref. (i).

Building 693 was previously released 7/95.

Building 845 was previously released 8/95.

Building 461 (Battery Shop) West side was released prior to shipyard closure. A review of electrical drawings of 461-East for existing or removed oil filled transformers, switches fuse cutouts ect. combined with a building walk-through resulted in seventeen samples taken of suspect oil stains within the motor generator room (three at a known location of removed transformers) and two oil stains next to GRA-35 in the main East bay of the building for a total of nineteen samples. Sample numbers, locations and results are shown in Enclosures (2) and (3).

Building 485 has been surveyed, sampled and released to the City of Vallejo in June of 96 with exception to the building's basement (transformer vault). The vault was excluded due to high levels of PCB contamination from electrical equipment.

Survey of building 515 showed five large oil stains on the (machine area) floor surface and one oil stain on a metal shelf inside room 117 (parts storage). No indication of oil type electrical equipment was found in a record and drawing search for the building. Sample numbers, locations and results are shown in Enclosures (2) and (3).

Building 757 was surveyed and seven large oil stains were sampled. No indication of oil type electrical equipment was found in a record and drawing search for the building. Sample numbers, locations and results are shown in Enclosures (2) and (3).

LABORATORY RESULTS:

Analysis results are enclosure (2). Sample results were all non-detect for PCB's at 1 ppm or 5 μg/100 cm^2 reportable limits, except for the following:

Building 461 sample result 6191-0397 has a PCB concentration of 14 μg/100 cm^2 at a reportable limit of 5 μg/100 cm^2. Samples 6208-0235, -0236, and -0237 have PCB levels of 235, 5260 and 27200 ppm, respectively at reportable limits from 20 to 50 ppm. The samples were taken of the concrete floor on which transformers had been formerly mounted. The floor as relatively intact with exception of the wire conduit (pipes) that were "epoxy" plugged after the transformer removal, which is a potential release to the environment.

Building 975 (IWPS #-4) sample results 6180-0163, -0164 and -0165 PCB concentrations of 2.6, 4.8 and 2.1 ppm, respectively at a reportable limit of 1 ppm. The pump station has the potential of PCB release to the environment via ground water intrusion.

CORRECTIVE ACTION AND CERTIFICATION:

To be compleated at a later date.